State of Utah

Department of
Environmental Quality

Dianne R. Nielson, Ph.D.
Executive Director

DIVISION OF AIR QUALITY
Richard W. Sprott
Director

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DAQE-IN2929002-06

September 1, 2006

Scot A. Donato
Manager, Environmental Health and Safety
Bill Barrett Corporation
1099 18th St, Suite 2300
Denver, Colorado 80202-0

Dear Mr. Donato:

Re: Intent to Approve: Modification to DAQE-AN2929001-03, Increase Site Production at the Sage Brush Flats Compressor Station, Carbon County – CDS A; ATT; HAPs
Project Code: N2929002-06

The attached document is the Intent to Approve (ITA) for the above-referenced project. ITAs are subject to public review. Any comments received shall be considered before an Approval Order is issued.

Future correspondence on this Intent to Approve should include the engineer's name as well as the DAQE number as shown on the upper right-hand corner of this letter. Please direct any technical questions you may have on this project to Mr. Tad Anderson. He may be reached at (801) 536-4456.

Sincerely,

Rusty Ruby, Manager
New Source Review Section

RR:TA:kw

cc: Southeastern Utah District Health Department

Mike Owens, EPA Region VIII

STATE OF UTAH

Department of Environmental Quality

Division of Air Quality

INTENT TO APPROVE: Modification to DAQE-AN2929001-03, Increase Site Production at the Sage Brush Compressor Station

Prepared By: Tad Anderson, Engineer
(801) 536-4456
Email: tdanderson@utah.gov

INTENT TO APPROVE NUMBER

DAQE-IN2929002-06

Date: September 1, 2006

Bill Barret Corporation

Source Contact
Scot A. Donato
(303) 293-9100

Richard W. Sprott
Executive Secretary
Utah Air Quality Board

Abstract

Bill Barrett Corporation (Corp.) has requested to modify DAQE-AN2929001-03 to install more engines at the Sage Brush Flats Compressor Station. The Sage Brush Flats Compressor Station is located north east of Price, Utah. The Sage Brush Flats Compressor Station will consists of seven natural gas internal combustion engines, four dehydration units, four tanks with tank heaters for produced water and oil, two BTEX units and a flare. Bill Barrett Corp. had never constructed the station that was originally permitted in 2003 and in 2006 requested to construct a new larger Sage Brush Flats Compressor Station. Bill Barrett's Sage Brush Flats Compressor Station will be classified as a new major source and requires a Title V permit. The estimated emissions from the operation of this source are above the threshold level established in DAQ's modeling for criteria pollutant guidelines for NOx with 139.01 tons per year. The emissions from the Sage Brush Flats Compressor Station are as follows: 8.12 Tons Per Year (TPY) of PM10, 139.01 TPY of NO_X, 120.63 of TPY CO, 84.14 TPY of VOC, and 8.40 TPY of combined HAP's.

The Sage Brush Flats Compressor Station is located in an attainment area for all criteria pollutants. This source is subject to 40CFR 60.11b for the flare. This source is classified as a new major source due to the emissions of 139.01 TPY of NO_x and 120.63 TPY of CO. Title V does apply to this source. Since there will be an increase in emissions associated with this proposal, a 30-day public comment period is required.

The Notice of Intent (NOI) for the above-referenced project has been evaluated and has been found to be consistent with the requirements of the Utah Administrative Code Rule 307 (UAC R307). Air pollution producing sources and/or their air control facilities may not be constructed, installed, established, or modified prior to the issuance of an Approval Order (AO) by the Executive Secretary of the Utah Air Quality Board.

A 30-day public comment period will be held in accordance with UAC R307-401-7. A notice of intent to approve will be published in the Sun Advocate on September 7, 2006. During the public comment period the proposal and the evaluation of its impact on air quality will be available for both you and the public to review and comment. If anyone so requests a public hearing it will be held in accordance with UAC R307-401-7. The hearing will be held as close as practicable to the location of the source. Any comments received during the public comment period and the hearing will be evaluated.

Please review the proposed AO conditions during this period and make any comments you may have. The proposed conditions of the AO may be changed as a result of the comments received. Unless changed, the AO will be based upon the following conditions:

General Conditions:

1 This Approval Order (AO) applies to the following company:

Corporate Office Location
Bill Barrett Corporation
1099 18th Street, Suite 2300
Denver, CO 80202
Phone Number (303) 293-9100
Fax Number (303) 291-0420

The equipment listed below in this AO shall be operated at the following location:

PLANT LOCATION:
From Price travel 9 Mile Canyon Road to Cottonwood Canyon Road. Go south on Cottonwood Canyon Road approximately 1.5 miles to Cottonwood Ridge road, Take east fork approximately 0.75 miles to fork, take northeast fork approximately 3 miles to Sage Brush Flat airstrip. Station is located at the northeast end of the airstrip. Utah Universal Transverse Mercator (UTM) Coordinate System:

4,399.09 km Northing, 576.38 km Easting, Zone 12, Datum NAD 1927

2. All definitions, terms, abbreviations, and references used in this AO conform to those used in the Utah Administrative Code (UAC) Rule 307 (R307) and Title 40 of the Code of Federal Regulations (40 CFR). Unless noted otherwise, references cited in these AO conditions refer to those rules.

3. Bill Barrett Corporation shall install and operate the plant or equipment according to the terms and conditions of this AO as requested in the Notice of Intent dated March 6, 2006.

4. The limits set forth in this AO shall not be exceeded without prior approval in accordance with R307-401.

5. Modifications to the equipment or processes approved by this AO that could affect the emissions covered by this AO must be reviewed and approved in accordance with R307-401.

6. All records referenced in this AO, which are required to be kept by the owner/operator, shall be made available to the Executive Secretary or Executive Secretary's representative upon request, and the records shall include the two-year period prior to the date of the request. Records shall be kept for a minimum of five years.

7. This AO shall replace DAQE-AN2929001-03 dated, December 3, 2003.

8. The approved installations shall consist of the following equipment:

A. Seven (7) Compressor engines
Site rating: up to 1,680 hp each, totaling 11,760 hp

B. Four (4) Natural Gas Dehydrators
Attached Equipment: Boiler
Fuel: Natural gas
Heating Capacity: 500,000 Btu/hr – each
Attached control device: Vapor Condenser Systems
(2) BTEX vapor condensers
Fully sealed piping network
See items 8-C, and 8-E below

C. One (1) Flare
Fuel: Vapor collection system off-gas

	Burner Capacity:	10,000,000 Btu/hr
	Attached equipment:	self-detecting, auto-ignite pilot flame
D.	Four (4) Storage Tanks	**
	Service:	Natural gas condensates, Water, Oil or miscellaneous solids
	Capacity:	16,800 gallons – each
	Attached equipment:	Tank Heater – each
	Fuel:	Natural Gas
	Burner Capacity:	500,000 Btu/hr - each

* Equivalency shall be determined by the Executive Secretary

** Each tank may contain natural gas condensates at some point in time. All four tanks shall be connected to the vapor collection system

9. Bill Barrett Corporation shall notify the Executive Secretary in writing when the installation of the equipment listed in Condition #8 has been completed and is operational, as an initial compliance inspection is required. All new compressor engines must have an initial compliance inspection conducted to determine compliance. To insure proper credit when notifying the Executive Secretary, send your correspondence to the Executive Secretary, attn: Compliance Section.

   If construction and/or installation has not been completed within eighteen months from the date of this AO, the Executive Secretary shall be notified in writing on the status of the construction and/or installation. At that time, the Executive Secretary shall require documentation of the continuous construction and/or installation of the operation and may revoke the AO in accordance with R307-401-11.

10. All emissions from the natural gas dehydrator vapor-liquid contact chamber exhaust stacks and still vents shall be routed to the BTEX condenser.

11. All emissions from the natural gas condensate storage tanks and the BTEX vapor condenser shall be routed through the flare listed in condition #8-C before being discharged to the atmosphere.

Limitations and Tests Procedures

12. Emissions to the atmosphere at all times from the indicated emission point shall not exceed the indicated rates:

Source: Natural Gas Compressor Engines (each)

Pollutant	lb/hr	g/bhp-hr (0.3% O_2 dry)
NO_x	2.59	0.70
CO	3.70	1.00

13. Stack testing to show compliance with the emission limitations stated in the above condition shall be performed as specified below:

Emissions Point	Pollutant	Testing Status	Test Frequency
Compressor Engines	CO	**	#
	NO_x	**	#

A. Testing Status

** Initial compliance testing is required. The initial test date shall be performed as soon as possible and in no case later than 180 days after the start up of a new emission source. A compliance test is required on the modified emission point that has an emission rate limit.

Compliance test at least once every two years or perform annual portable analyzer testing, subsequent to the initial compliance test. The Executive Secretary may require testing at any time.

B. Notification

The Executive Secretary shall be notified at least 30 days prior to conducting any required emission testing. A source test protocol shall be submitted to DAQ when the testing notification is submitted to the Executive Secretary. The source test protocol shall be approved by the Executive Secretary prior to performing the test(s). The source test protocol shall outline the proposed test methodologies, stack to be tested, and procedures to be used. A pretest conference shall be held, if directed by the Executive Secretary.

C. Sample Location

The emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other methods as approved by the Executive Secretary. An Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.

D. Volumetric Flow Rate

40 CFR 60, Appendix A, Method 2, or other testing methods approved for use by the USEPA.

E. Nitrogen Oxides (NO_x)

40 CFR 60, Appendix A, Method 7, 7A, 7B, 7C, 7D or 7E, or other testing methods approved for use by the USEPA.

F. Carbon Monoxide (CO)

40 CFR 60, Appendix A, Method 10, or other testing methods approved for use by the USEPA.

G. Calculations

To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary, to give the results in the specified units of the emission limitation.

H. New Source Operation

For a new source/emission point, the production rate during all compliance testing shall be no less than 90% of the production rate listed in this AO. If the maximum AO allowable production rate has not been achieved at the time of the test, the following procedure shall be followed:

1) Testing shall be at no less than 90% of the production rate achieved to date.

2) If the test is passed, the new maximum allowable production rate shall be 110% of the tested achieved rate, but not more than the maximum allowable production rate. This new allowable maximum production rate shall remain in effect until successfully tested at a higher rate.

3) The owner/operator shall request a higher production rate when necessary. Testing at no less than 90% of the higher rate shall be conducted. A new maximum production rate (110% of the new rate) will then be allowed if the test is successful. This process may be repeated until the maximum AO production rate is achieved.

I. Existing Source Operation

For an existing source/emission point, the production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

J. Internal Combustion Engines

Portable testing analyzers may be used to test natural gas fired IC engines. If portable analyzer testing is employed, a correlation must be established during the initial tests between the portable testing analyzer and Method 7, 7A, 7B, 7C, 7D, 7E, and 10. The portable analyzer must be calibrated as per the manufacturer's specification prior to each test. Notification of each annual portable test must be provided as per condition 13.C above.

14. Visible emissions from the following emission points shall not exceed the following values:

    A. The flare - no visible emissions
    B. All natural gas combustion equipment - 10% opacity
    B. All other points - 20% opacity

    Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9.

    For sources that are subject to NSPS, opacity shall be determined by conducting observations in accordance with 40 CFR 60.11(b) and 40 CFR 60, Appendix A, Method 9.

Fuels

15. The owner/operator shall use only pipeline quality natural gas as a primary fuel for the engines, tank heaters and dehydration units. If any other fuel is to be used, an AO shall be required in accordance with R307-401, UAC.

Records & Miscellaneous

16. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this Approval Order including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Executive Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. All maintenance performed on equipment authorized by this AO shall be recorded.

17. The owner/operator shall comply with R307-107. General Requirements: Unavoidable Breakdowns.

The Executive Secretary shall be notified in writing if the company is sold or changes its name.

Under R307-150-1, the Executive Secretary may require a source to submit an emission inventory for any full or partial year on reasonable notice.

This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including R307.

A copy of the rules, regulations and/or attachments addressed in this AO may be obtained by contacting the Division of Air Quality. The Utah Administrative Code R307 rules used by DAQ, the Notice of Intent (NOI) guide, and other air quality documents and forms may also be obtained on the Internet at the following web site:
http://www.airquality.utah.gov/

These emissions are for the purpose of determining the applicability of Prevention of Significant Deterioration, non-attainment area, Maintenance area, and Title V source requirements of the R307. They are not to be used for determining compliance.

The Potential To Emit (PTE) emissions for Bill Barrett Corporation's, Sage Brush Flats Compressor Station are currently calculated at the following values:

	Pollutant	Tons/yr
A.	PM_{10}	8.12
B.	NO_x	139.01
C.	CO	120.63
D.	VOC	84.14
E.	Formaldehyde	4.08
F.	Benzene	2.00
G.	Toluene	1.11
H.	Xylene	0.12
I	n-Hexane	1.10
	Total HAP's	8.4

The Division of Air Quality is authorized to charge a fee for reimbursement of the actual costs incurred in the issuance of an AO. An invoice will follow upon issuance of the final Approval Order.

Sincerely,

Rusty Ruby, Manager
New Source Review Section